# Supplementary material

## Full sample statistics of variables used in the model

Table S1. Full weighted sample statistics.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **São Paulo** | **Istanbul** | **Mumbai** |
| sample | n | 1000 | 1013 | 1001 |
| gender | male | 46.7% | 50.0% | 54.9% |
|  | female | 53.3% | 50.0% | 45.1% |
| age | <20 | 9.7% | 13.3% | 10.1% |
|  | 20 - <40 | 47.9% | 47.3% | 50.6% |
|  | 40 - <60 | 33.9% | 33.5% | 36.9% |
|  | ≥60 | 8.5% | 5.9% | 2.4% |
| household size | 1 | 3.9% | 1.4% | 1.9% |
|  | 2-3 | 39.5% | 32.4% | 39.7% |
|  | 4-5 | 40.4% | 50.5% | 48.5% |
|  | 5+ | 16.2% | 15.7% | 10.0% |
| social status a) | A/B (high) | 19.8% | 16.0% | 43.1% |
|  | C | 50.2% | 65.0% | 25.0% |
|  | D | 27.0% | 17.7% | 18.3% |
|  | E (low) | 2.9% | 1.3% | 13.7% |
| qualification | primary/none | 36.3% | 45.3% | 38.0% |
|  | secondary | 18.6% | 18.0% | 37.3% |
|  | higher | 45.0% | 36.7% | 24.8% |
| job status | not working | 37.9% | 59.6% | 53.8% |
|  | informal | 28.3% | 9.9% | 25.6% |
|  | formal | 33.8% | 30.4% | 20.6% |
| car | none | 60.4% | 69.4% | 97.7% |
|  | 1+ | 39.6% | 30.6% | 2.3% |
| distance to CBD (km) b) | <10  | 13.9% | 35.0% | 17.1% |
|  | 10 - <20 | 39.3% | 37.4% | 25.9% |
|  | 20 - <40 | 37.5% | 25.5% | 37.9% |
|  | ≥40 | 9.3% | 2.0% | 19.2% |
| distance to MRT (km) b) | <0.5 | 5.0% | 9.0% | 28.7% |
|  | 0.5 - <1 | 9.7% | 24.5% | 24.3% |
|  | 1 - <2 | 19.3% | 19.0% | 27.5% |
|  | 2 - <5 | 44.8% | 22.3% | 15.8% |
|  | ≥5 | 21.2% | 25.2% | 3.8% |
| time to shopping area (min) | >30 | 54.5% | 7.3% | 3.1% |
|  | 30 - >20 | 30.2% | 27.7% | 20.5% |
|  | 20 - >10 | 13.2% | 62.3% | 62.2% |
|  | ≤10 | 2.2% | 2.7% | 14.2% |
| residence c) | slum | 19.4% | 5.4% | 27.0% |
|  | apartment block | 1.7% | 42.2% | 32.4% |
|  | unguarded house | 77.3% | 32.5% | 28.2% |
|  | guarded properties | 1.6% | 19.8% | 12.5% |
| a) Social status categories were based on an occupational household grid. Categories range from A (highest) to E (lowest). In São Paulo and Istanbul, the category C was further divided into C1 and C2. b) Based on OpenTripPlanner distance along the walkable road network. CBD was defined as Praça de Sé for São Paulo, Taksim Square (European side) and Kadıköy Ferry (Asian side) for Istanbul and Chhatrapati Shivaji Terminus in Mumbai. c) In São Paulo, interviewers used ‘house in an urbanised area’ as a general option, which includes different typologies including apartment blocks. The brief for interviewers was adjusted in the following surveys in Istanbul and Mumbai.  |

## Defining land use diversity

In the absence of official land use data, a land use diversity measure was derived from the survey. The survey asked about a respondent’s travel time to a range of amenities: shopping areas / markets, parks, hospitals, public offices, cinemas, theatres and libraries. In all cities, this had a high number of missing. The variable with the lowest number of missings was distance to shopping areas or markets in all cities. Principal Components analysis applied to four amenities with few missings reveals that distance to shopping areas was highly correlated with other amenities (Table S2).

Table S2. Principal Components of distance to selected amenities.

|  |  |  |  |
| --- | --- | --- | --- |
| **variable** | **São Paulo** | **Istanbul** | **Mumbai** |
| Distance to cinemas | .880 | .691 | .596 |
| Distance to hospitals | .340 | .635 | .797 |
| Distance to public offices | .361 | .580 | .529 |
| Distance to shopping areas or markets | **.971** | **.616** | **.547** |
| Eigenvalue  | 1.963 | 1.597 | 1.569 |
| Percentage of variance accounted for | .491 | .399 | .392 |
| Solution p-value | .000 | .013 | .666 |
| N (number of neighbourhoods with no missing values) | 90 | 100 | 53 |